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Child Restraint Use in 2002:

Results from the 2002 NOPUS Controlled Intersection Study



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The National Occupant Protection Use Survey provides the nation's only probability-based observed data on child restraint use on the nation's roads.



Controlled Intersection Data Collection

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Observe

shoulder belt use (child restraint use)

of driver (at most 3 children under 8 in the front and second seats)

in passenger vehicles with no commercial markings
at intersections controlled by a stop sign or stoplight
during daylight hours.



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New Methodologies in 2002



New Age Group and Restraint to Add Booster Seat Age Group

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- **Age groups**

- ♦ 0 (infant), 1-3 (toddler), 4-7 (booster-age child), 8-15 (youth), 16-24 (young adult), 25-69 (adult), 70+ (senior)

- **Restraints**

- ♦ forward-facing child seat, rear-facing child seat, booster seat, belt

Increased Number of Sites

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- **2000 Controlled Intersection**
 - ◆ 700 sites
 - ◆ 12,000 vehicles
 - ◆ 290 children (ages 0-4)
 - 90 infants, 200 toddlers (ages 1-4)
- **2002 Controlled Intersection**
 - ◆ 1,100 sites
 - ◆ 38,000 vehicles
 - ◆ 3,500 children (ages 0-7)
 - 500 infants, 1,000 toddlers (ages 1-3), 2,000 booster-age children (ages 4-7)
- Decreased sampling error.



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Child Restraint Use in 2002



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Highlights

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- Restraint use for young children at record levels.
- Only 83% of 4-7 year-olds are restrained.
- Too many children are still in the front seat.

NEW
ESTIMATE

NEW
ESTIMATES



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Highlights, Continued

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- Belted drivers continue to restrain their child passengers more than unbelted drivers.
- Male drivers are improving at restraining their child passengers.
- Evidence that education programs on the proper restraint for children are working.
 - ◆ But still some premature graduation.



Child Restraint Use and Front Seat Occupancy

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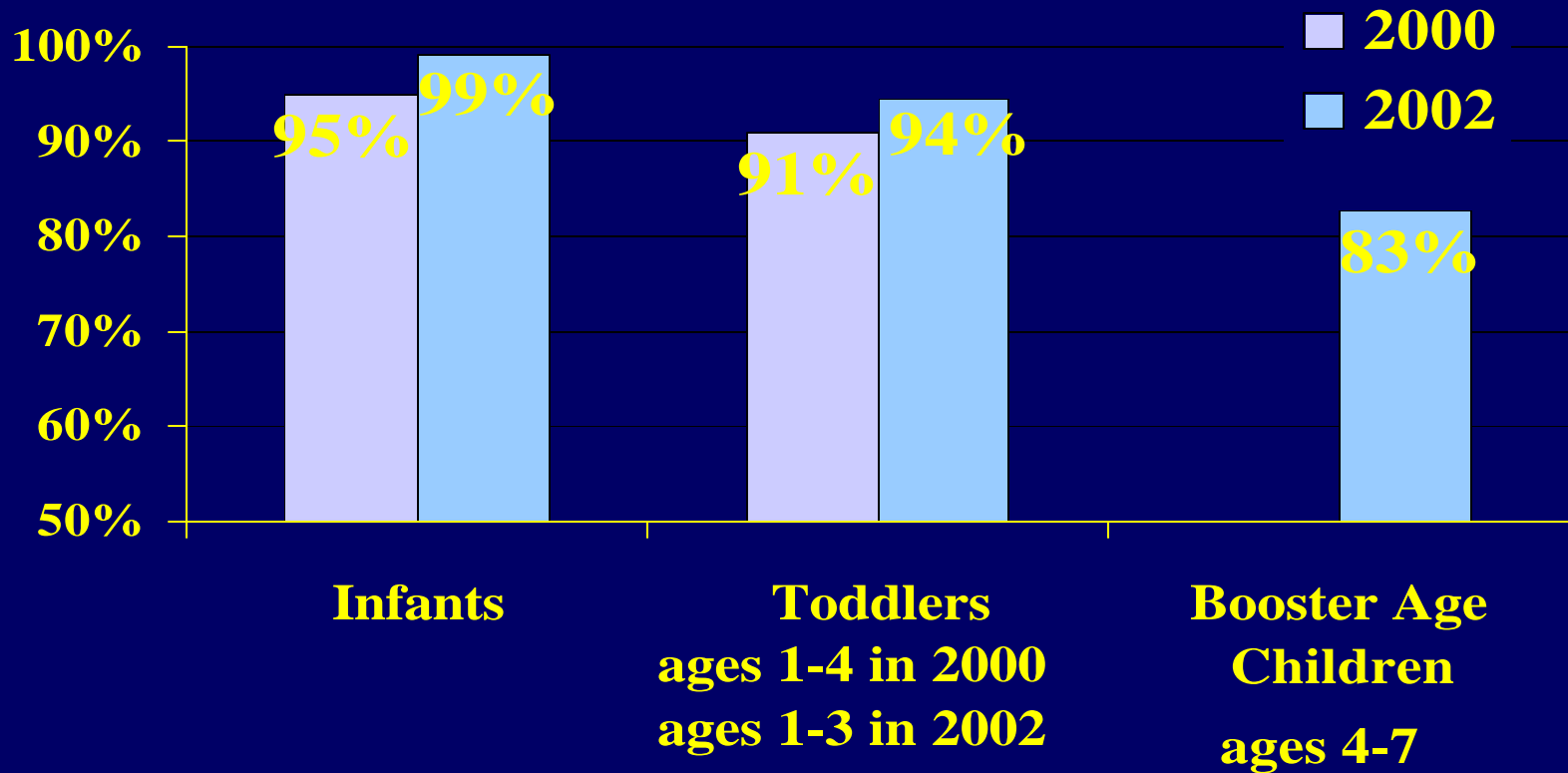
Age	Restraint Use in		Percent in Front Seat in 2002
	2000	2002	
Infants (0 years old)	95%	99%	15%
Toddlers (1-4 in 2000; 1-3 in 2002)	91%	94%	10%
Booster age children (4-7 years old)	NA	83%	29%

- Infant and toddler use at record levels.
- Too many children are still in the front seat.
- First restraint estimate for 4-7 year olds.



Restraint Use by Children in 2000 and 2002

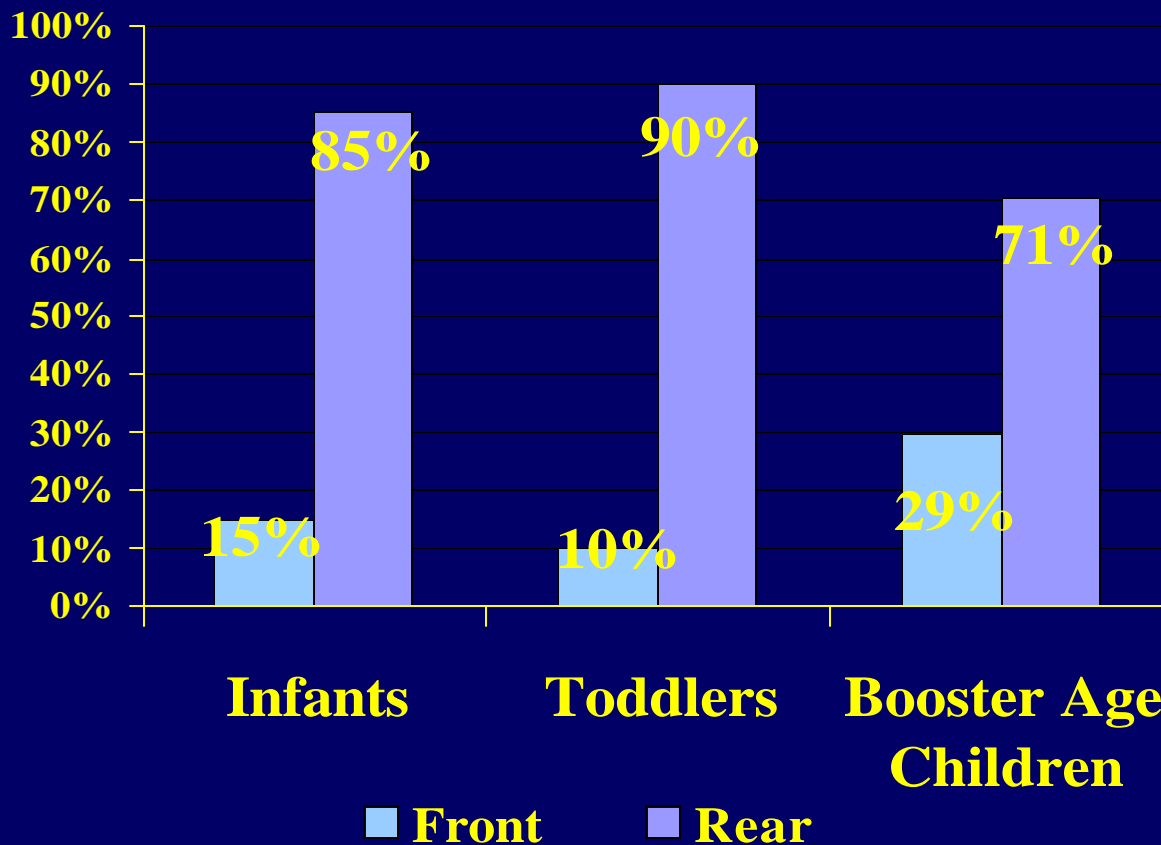
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Source: National Center for Statistics and Analysis, NHTSA, NOPUS, 2000, 2002

Seating Positions of Children in 2002

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- Children under 13 shouldn't be in front seat.
- The percent of infants is particularly alarming.

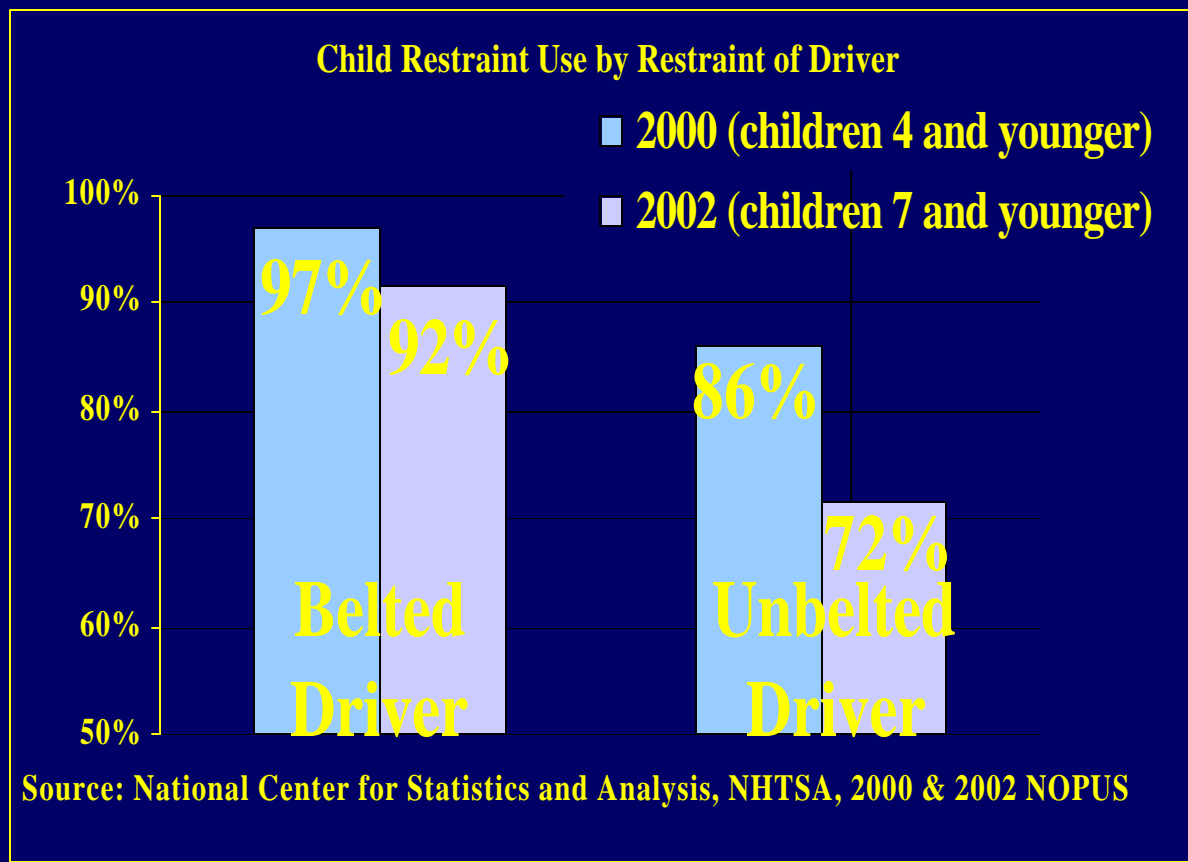
Source: National Center for Statistics and Analysis, NHTSA, 2002 NOPUS



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Belted Drivers Restrain Their Children More than Unbelted Drivers.

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- We're 94% confident they do.
- Evidence that belt enforcement benefits kids.
- Overall decrease in restraint use might be from change in ages of children.



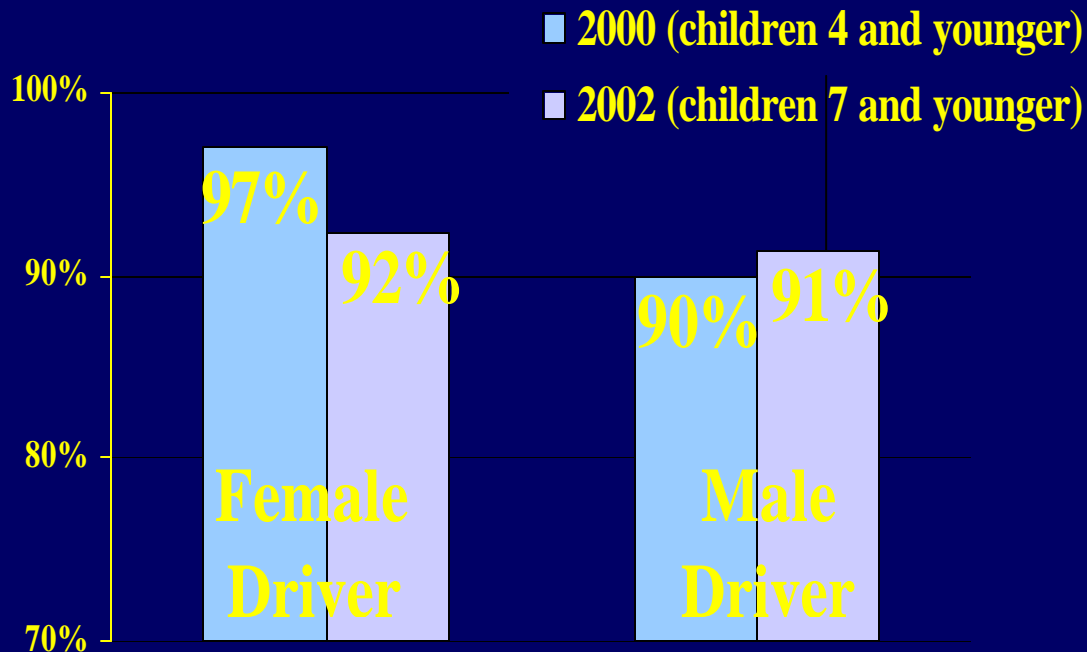
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Males Are Improving at Restraining Their Child Passengers.

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Child Restraint Use by Gender of Driver



Source: National Center for Statistics and Analysis, NHTSA, 2000 & 2002
NOPUS

- Do females restrain children more than males do?
 - ♦ 74% confident they did in 2000; 7-point gap.
 - ♦ Hardly confident (9%) in 2002; 1-point gap.
- Decreases in use might be from change in ages.



Education Programs on Proper Child Restraints Are Working

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- **More infants are in rear-facing safety seats.**
 - ◆ 32% in 2002, 24% in 2000, should see 100%.
- **More toddlers are in front-facing safety seats.**
 - ◆ 62% in 2002, 39% in 2000, should see 92%.
- **73% of booster age kids are in boosters or belts.**
 - ◆ Don't know how many are in belts; 63% should be in boosters.



But There's Still Some Premature Graduation

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- Too many infants are in front-facing safety seats.
 - ◆ 66% in 2002, 68% in 2000, should see none.
- Too many toddlers are in belts or boosters.
 - ◆ 29% in 2002, 45% in 2000, should see none.
- Too few 4-7 year olds are in front-facing safety seats.
 - ◆ 9% in 2002, should see 37%.



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Restraint Use by Infants

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Restraint	Use in		What We Should See*
	2000	2002#	
Front-facing safety seat	68%	66%	0%
Rear-facing safety seat	24%	32%	100%
High-back booster seat	NA	1%	0%
Belt or backless booster	3%	1%	0%
No restraint observed	5%	1%	0%

#Totals do not sum to 100%, due to rounding.

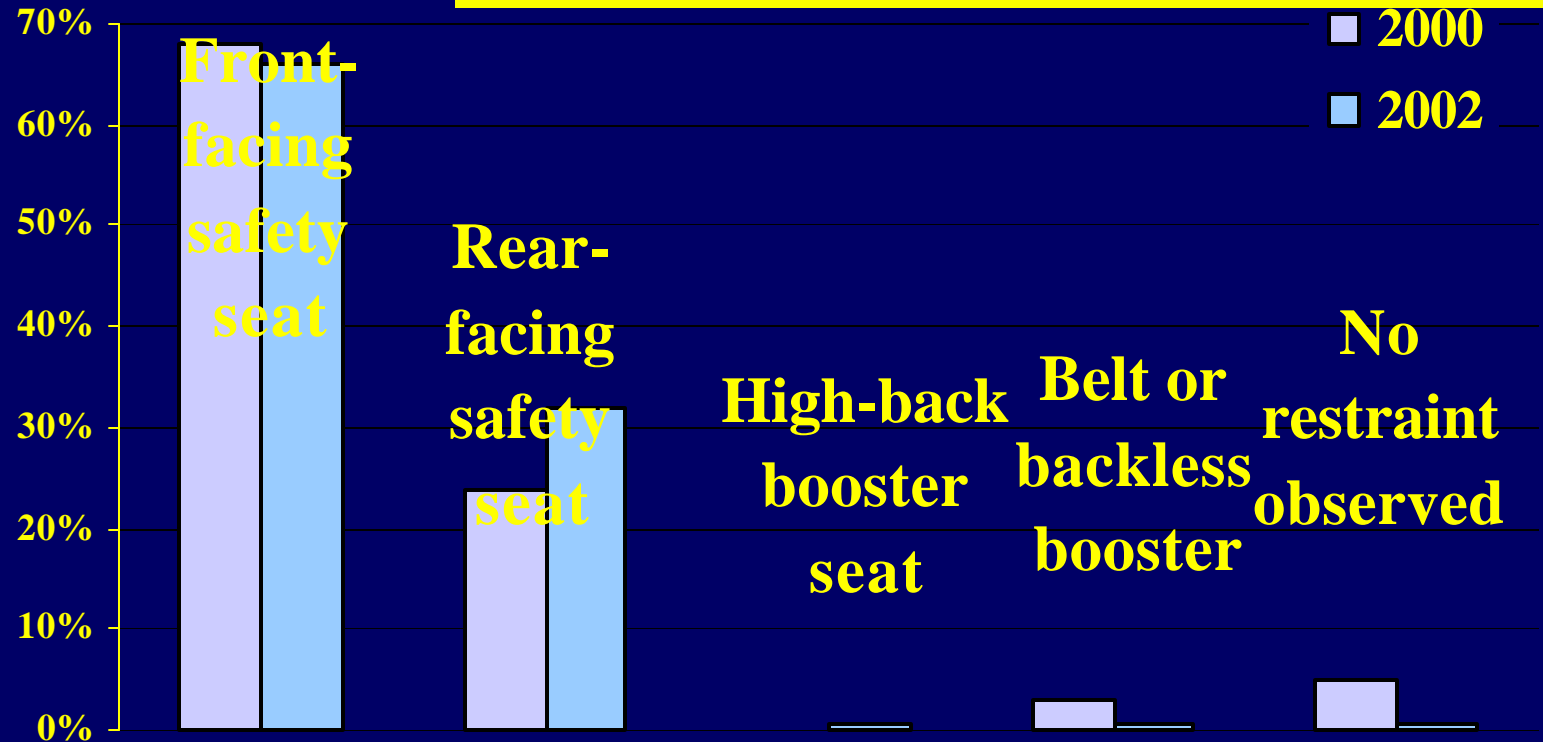
*Based on NHTSA recommendations.



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Infants, Continued

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Source: National Center for Statistics and Analysis, NHTSA, 2000 & 2002 NOPUS



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Restraint Use by Toddlers

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Restraint	Use# by		What We Should See*
	1-4 Year Olds in 2000	1-3 Year Olds in 2002	
Front-facing safety seat	39%	62%	92%
Rear-facing safety seat	8%	4%	8%
High-back booster seat	NA	16%	0%
Belt or backless booster	45%	13%	0%
No restraint observed	9%	6%	0%

#Totals do not sum to 100% due to rounding.

Green: Significant change.

*Based on NHTSA recommendations and CDC data.

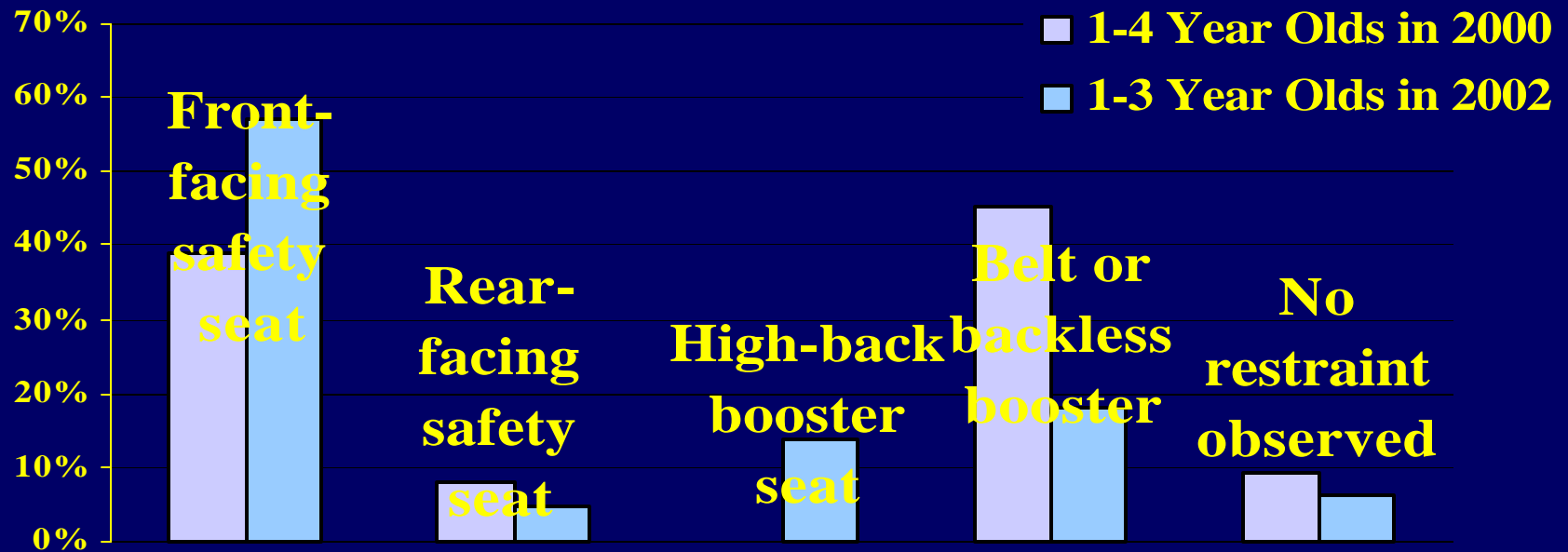
- Changes in use could be due to changes in age.



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Toddlers, Continued

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Source: National Center for Statistics and Analysis, NHTSA, 2000 & 2002 NOPUS

Restraint Use by 4-7 Year Olds

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Restraint	Use in 2002	What We Should See*
Front-facing safety seat	9%	37%
Rear-facing safety seat	1%	0%
High-back booster seat	6%	
Belt or backless booster	67%	
No restraint observed	17%	0%

Should sum to 63%.

*Based on NHTSA recommendations and CDC data.

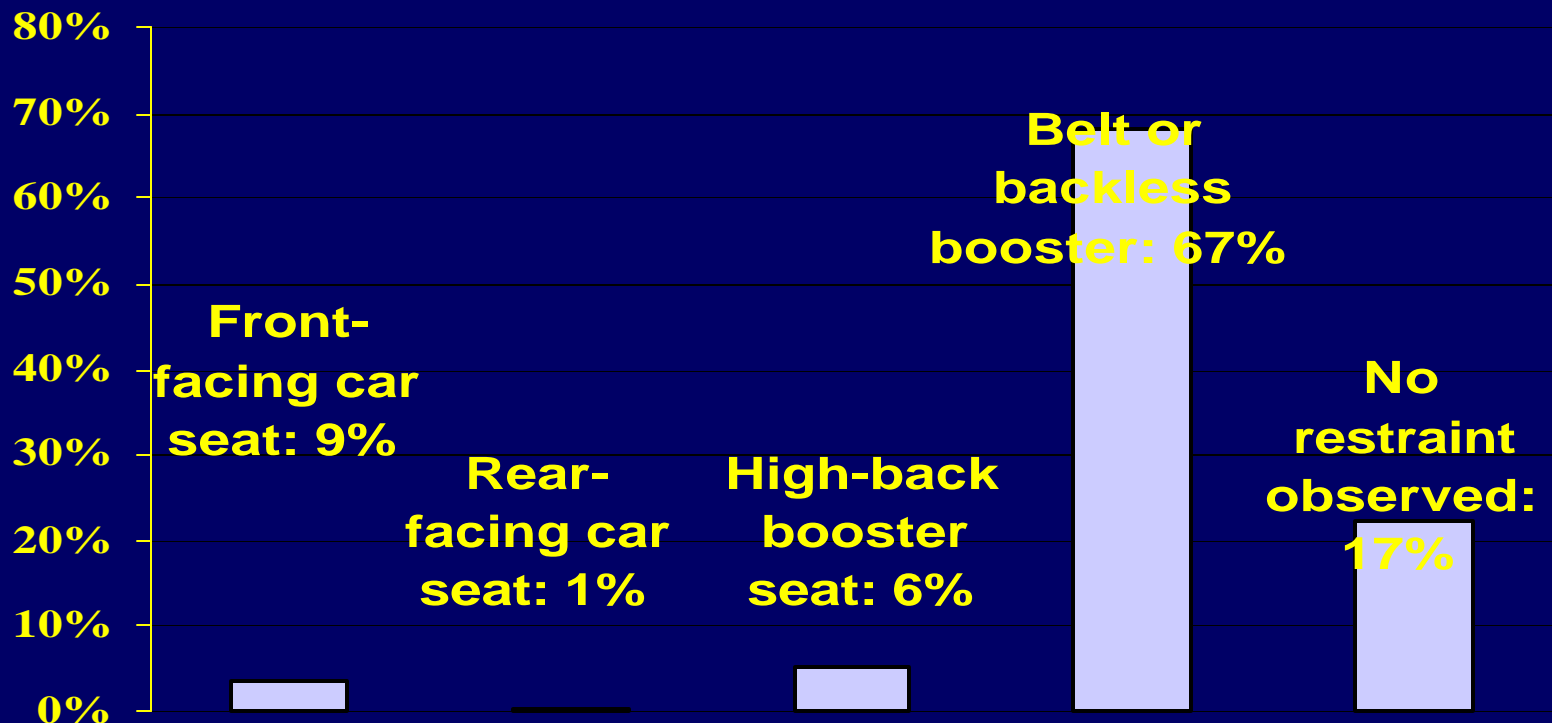
- **SAFEKIDS:** 37% of those who should be in a booster are.
- Observational error in estimating age.



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4-7 Year Olds, Continued

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Source: National Center for Statistics and Analysis, NHTSA, 2000 & 2002 NOPUS